Milk Production



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March Milk Production down 0.4 Percent

Milk production in the 24 major States during March totaled 18.8 billion pounds, down 0.4 percent from March 2021. February revised production, at 16.8 billion pounds, was down 0.7 percent from February 2021. The February revision represented an increase of 8 million pounds or less than 0.1 percent from last month's preliminary production estimate.

Production per cow in the 24 major States averaged 2,113 pounds for March, 7 pounds above March 2021.

The number of milk cows on farms in the 24 major States was 8.90 million head, 68,000 head less than March 2021, but 15,000 head more than February 2022.

January-March Milk Production down 1.0 Percent

Milk production in the United States during the January - March quarter totaled 56.3 billion pounds, down 1.0 percent from the January - March quarter last year.

The average number of milk cows in the United States during the quarter was 9.38 million head, unchanged from the October - December quarter, but 85,000 head less than the same period last year.

Monthly Milk Production - 24 Selected States





Milk Cows and Production by Quarter - United States: 2021-2022

[May not add due to rounding. Blank data cells indicate estimation period has not vet begun]

	Milk cows 1		Milk pe	r cow ²	Milk production ²		
Quarter	2021	2022	2021	2022	2021	2022	Change from 2021
	(1,000 head)	(1,000 head)	(pounds)	(pounds)	(million pounds)	(million pounds)	(percent)
January-March		9,381	6,005 6,119 5,914 5,909	5,998	56,847 58,147 55,836 55,428	56,263	-1.0
Annual	9,448		23,948		226,258		

¹ Includes dry cows. Excludes heifers not yet fresh.

Milk Cows and Production by Month - 24 Selected States: 2021-2022

[May not add due to rounding. Blank data cells indicate estimation period has not yet begun]

	Milk c	ows 1	Milk pe	r cow ²	Milk production ²		
Month	2021	2022	2021	2022	2021	2022	Change from 2021
	(1,000 head)	(1,000 head)	(pounds)	(pounds)	(million pounds)	(million pounds)	(percent)
January February	8,938 8,954	8,874 8,887	2,067 1,884	2,051 1,885	18,477 16,871	18,198 16,755	-1.5 -0.7
March	8,970	8,902	2,106	2,113	18,888	18,812	-0.4
April May	8,987 8,996		2,055 2,106		18,467 18,949		
June July	8,991 8,983		2,011 2,034		18,078 18,272		
August September	8,939 8,909		2,004 1,935		17,910 17,239		
October	8,892		2,003		17,812		
November December	8,888 8,880		1,939 2,024		17,232 17,971		
Annual	8,944		24,169		216,166		

¹ Includes dry cows. Excludes heifers not yet fresh. ² Excludes milk sucked by calves.

Estimated Milk Cows and Production by Month - United States: 2021-2022

[May not add due to rounding. Blank data cells indicate estimation period has not vet begun]

	Milk c	ows 1	Milk pe	r cow ²		Milk production ²	
Month	2021	2022	2021	2022	2021	2022	Change from 2021
	(1,000 head)	(1,000 head)	(pounds)	(pounds)	(million pounds)	(million pounds)	(percent)
January	9,450 9,466 9,482 9,500 9,507 9,501 9,483 9,438 9,405 9,387 9,382 9,373	9,367 9,380 9,395	2,049 1,868 2,088 2,037 2,088 1,994 2,014 1,984 1,916 1,984 1,920 2,005	2,033 1,869 2,096	19,365 17,685 19,797 19,350 19,855 18,942 19,097 18,721 18,018 18,623 18,015 18,790	19,040 17,533 19,690	-1.7 -0.9 -0.5

¹ Includes dry cows. Excludes heifers not yet fresh. ² Excludes milk sucked by calves.

² Excludes milk sucked by calves.

Milk Cows and Production - 24 Selected States: March 2021 and 2022

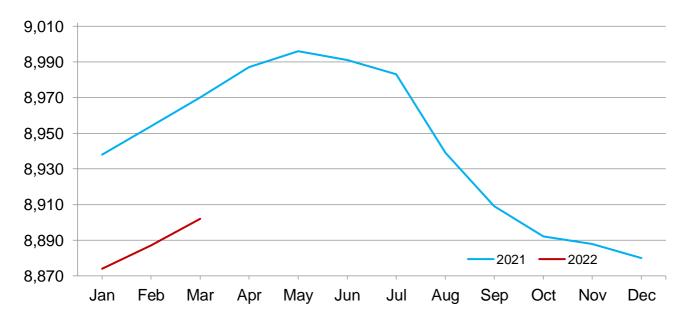
[May not add due to rounding]

	Milk c	ows 1	Milk per	cow ²		Milk production ²	
State	2021	2022	2021	2022	2021	2022	Change from 2021
	(1,000 head)	(1,000 head)	(pounds)	(pounds)	(million pounds)	(million pounds)	(percent)
Arizona	200	198	2,260	2,250	452	446	-1.3
California	1,720	1,721	2,165	2,175	3,724	3,743	0.5
Colorado	204	202	2,230	2,230	455	450	-1.1
Florida	109	98	1,880	1,870	205	183	-10.7
Georgia	81	88	2,010	2,010	163	177	8.6
Idaho	652	652	2,135	2,135	1,392	1,392	-
Illinois	83	81	1,940	1,940	161	157	-2.5
Indiana	194	187	2,065	2,065	401	386	-3.7
lowa	227	227	2,115	2,130	480	484	0.8
Kansas	175	170	2,080	2,060	364	350	-3.8
Michigan	442	427	2,345	2,355	1,036	1,006	-2.9
Minnesota	462	453	1,970	1,955	910	886	-2.6
New Mexico	333	296	2,165	2,210	721	654	-9.3
New York	626	620	2,140	2,140	1,340	1,327	-1.0
Ohio	260	250	1,910	1,920	497	480	-3.4
Oregon	126	127	1,795	1,805	226	229	1.3
Pennsylvania	475	467	1,880	1,870	893	873	-2.2
South Dakota	147	177	1,940	1,930	285	342	20.0
Texas	618	640	2,180	2,245	1,347	1,437	6.7
Utah	96	94	1,970	1,965	189	185	-2.1
Vermont	119	119	1,870	1,855	223	221	-0.9
Virginia	73	71	1,820	1,830	133	130	-2.3
Washington	278	264	2,060	2,085	573	550	-4.0
Wisconsin	1,270	1,273	2,140	2,140	2,718	2,724	0.2
24-State Total	8,970	8,902	2,106	2,113	18,888	18,812	-0.4

⁻ Represents zero.

Monthly Milk Cows - 24 Selected States

Thousand head



¹ Includes dry cows. Excludes heifers not yet fresh.

² Excludes milk sucked by calves.

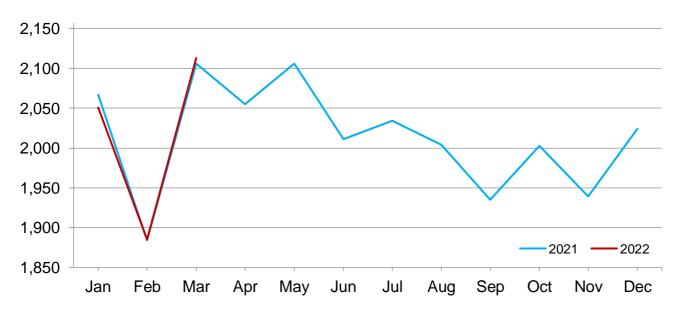
Milk Cows and Production - 24 Selected States: February 2021 and 2022

[May not add due to rounding]

	Milk o	cows 1	Milk pe	r cow ²	Milk production ²		
	2021	2022	2021	2022	2021	2022	Change from 2021
	(1,000 head)	(1,000 head)	(pounds)	(pounds)	(million pounds)	(million pounds)	(percent)
Arizona	200	198	2,000	2,020	400	400	-
California	1,720	1,721	1,935	1,925	3,328	3,313	-0.5
Colorado	203	202	1,995	1,990	405	402	-0.7
Florida	108	99	1,695	1,675	183	166	-9.3
Georgia	80	88	1,790	1,840	143	162	13.3
Idaho	652	652	1,910	1,905	1,245	1,242	-0.2
Illinois	83	80	1,725	1,720	143	138	-3.5
Indiana	193	187	1,820	1,830	351	342	-2.6
lowa	224	226	1,905	1,910	427	432	1.2
Kansas	174	170	1,860	1,850	324	315	-2.8
Michigan	441	428	2,100	2,100	926	899	-2.9
Minnesota	461	453	1,780	1,775	821	804	-2.1
New Mexico	336	292	1,955	1,955	657	571	-13.1
New York	626	620	1,905	1,910	1,193	1,184	-0.8
Ohio	260	248	1,700	1,720	442	427	-3.4
Oregon	125	127	1,605	1,620	201	206	2.5
Pennsylvania	475	468	1,680	1,670	798	782	-2.0
South Dakota	143	175	1,755	1,750	251	306	21.9
Texas	618	633	1,950	1,985	1,205	1,257	4.3
Utah	96	94	1,770	1,770	170	166	-2.4
Vermont	120	119	1,660	1,660	199	198	-0.5
Virginia	74	71	1,600	1,615	118	115	-2.5
Washington	278	263	1,850	1,865	514	490	-4.7
Wisconsin	1,264	1,273	1,920	1,915	2,427	2,438	0.5
24-State Total	8,954	8,887	1,884	1,885	16,871	16,755	-0.7

Monthly Milk Per Cow - 24 Selected States

Pounds



⁻ Represents zero.

1 Includes dry cows. Excludes heifers not yet fresh.

² Excludes milk sucked by calves.

Milk Cows and Production - States and United States: Revised October - December 2020 and 2021

[May not add due to rounding]

	October - Decemb	er milk cows 1	October - December milk production ²				
State	2020	2021	2020	2021	Change from 2020		
	(1,000 head)	(1,000 head)	(million pounds)	(million pounds)	(percent)		
Alabama	3.0	3.0	10.0	8.0	-20.0		
Alaska	(D)	(D)	(D)	(D)	(NA		
Arizona	199.0	194.0	1,208.0	1,165.0	-3.6		
Arkansas	5.0	4.5	14.0	13.0	-7. <i>′</i>		
California	1,720.0	1,719.0	10,225.0	10,289.0	0.6		
Colorado	201.0	201.0	1,306.0	1,303.0	-0.2		
Connecticut	19.0	18.5	108.0	104.0	-3.7		
Delaware	3.7	2.8	16.4	11.4	-30.5		
Florida	111.0	105.0	535.0	511.0	-4.5		
Georgia	81.0	82.0	437.0	449.0	2.7		
Hawaii	(D)	(D)	(D)	(D)	(NA		
daho	646.0	651.0	3,978.0	4,014.0	0.9		
Illinois	84.0	81.0	446.0	428.0	-4.0		
ndiana	191.0	186.0	1,122.0	1.089.0	-4.0 -2.9		
owa	219.0	225.0	1,122.0	1,377.0	-2.3 1.8		
Kansas	172.0	168.0	1,023.0	1,003.0	-2.0		
KansasKansas Kansas	47.0	45.0	219.0	214.0	-2.0 -2.3		
Louisiana	10.0	9.0	31.0	28.0	-9.7		
	27.0	26.0	143.0	136.0	-9.7 -4.9		
Maine Maryland	43.0	41.0	221.0	206.0	-4.8 -6.8		
Massachusetts	10.0	9.5	49.0	47.0	-4.1		
					-4.1 -0.6		
Michigan	435.0	434.0	2,925.0	2,908.0			
Minnesota	454.0	461.0	2,583.0	2,613.0	1.2		
Mississippi	8.0	7.0	30.0 256.0	23.0 230.0	-23.3 -10.2		
Missouri	75.0 11.0	69.0 11.0	62.0	59.0	-10.2 -4.8		
Montana			369.0		-4.0 -4.9		
Nebraska	60.0 33.0	58.0	201.0	351.0 193.0	-4.s -4.0		
Nevada New Hampshire	11.0	32.0 10.5	57.0	54.0	-4.0 -5.3		
New Jersey	4.6	4.2	24.0	21.0	-12.5		
New Mexico	334.0	295.0	2,060.0	1,782.0	-13.5		
New York	626.0	624.0	3,803.0	3,812.0	0.2		
North Carolina	40.0	39.0	217.0	222.0	2.3		
North Dakota	15.0	15.0	82.0	82.0	۷.۰		
Ohio	257.0	250.0	1,411.0	1,361.0	-3.5		
Oklahoma	41.0	39.0	174.0	176.0	1.1		
Oregon	125.0	125.0	645.0	644.0	-0.2		
Pennsylvania	481.0	470.0	2,533.0	2,453.0	-3.2		
Rhode Island	0.5	0.5	2,555.0	2,433.0	-3. <u>2</u> -11.1		
South Carolina	10.0	9.0	42.0	38.0	-9. .		
South Dakota	140.0	166.0	812.0	961.0	18.3		
Tennessee	29.0	27.0	129.0	118.0	-8.5		
Texas	610.0	625.0	3,824.0	3,929.0	2.7		
Jtah	95.0	94.0	5,624.0 551.0	539.0	-2.2		
/ermont	120.0	120.0	636.0	629.0	-2.2 -1.1		
/irginia	74.0	71.0	372.0	359.0	-3.		
Vashington	279.0	262.0	1,665.0	1,551.0	-5.8 -6.8		
	6.0	5.0	21.0	1,551.0	-9.		
West Virginia							
Visconsin Vyoming	1,259.0 8.0	1,277.0 9.0	7,711.0 51.8	7,846.0 56.2	1.8 8.9		
Other States ³	0.8	0.9	1.3	1.2	-7.7		
United States	9,434.0	9,381.0	55,694.0	55,428.0	-0.		

⁻ Represents zero.
(D) Withheld to avoid disclosing data for individual operations.

⁽NA) Not available.

¹ Includes dry cows. Excludes heifers not yet fresh.
2 Excludes milk sucked by calves.
3 Other States includes Alaska and Hawaii.

Milk Cows and Production - States and United States: Preliminary January - March 2021 and 2022

[May not add due to rounding]

-	January - March	milk cows 1	January - March milk production ²				
State	2021	2022	2021	2022	Change from 2021		
	(1,000 head)	(1,000 head)	(million pounds)	(million pounds)	(percent)		
Alabama	3.0	3.0	12.0	10.0	-16.7		
Alaska	(D)	(D)	(D)	(D)	(NA)		
Arizona	20Ò.Ó	197.0	1,284.0	1,262.Ó	`-1.Ź		
Arkansas	5.0	4.5	17.0	13.0	-23.5		
California	1,720.0	1,721.0	10,655.0	10,591.0	-0.6		
Colorado	203.0	202.0	1,310.0	1,297.0	-1.0		
Connecticut	19.0	18.0	112.0	108.0	-3.6		
Delaware	3.0	2.8	14.5	13.0	-10.3		
Florida	109.0	100.0	587.0	534.0	-9.0		
Georgia	80.0	87.0	462.0	511.0	10.6		
Hawaii	(D)	(D)	(D)	(D)	(NA)		
Idaho	651.0	652.0	3,995.0	4,000.0	0.1		
Illinois	83.0	80.0	461.0	444.0	-3.7		
Indiana	193.0	187.0	1,138.0	1,103.0	-3.1		
lowa	224.0	226.0	1,374.0	1,387.0	0.9		
Kansas	174.0	170.0	1,047.0	1,011.0	-3.4		
Kentucky Louisiana	47.0 10.0	44.0 9.0	239.0 38.0	226.0 33.0	-5.4 -13.2		
Maine	27.0	26.0	146.0	137.0	-6.2		
Maryland	43.0	41.0	231.0	218.0	-5.6		
Massachusetts	10.0	9.5	50.0	48.0	-4.0		
Michigan	441.0	428.0	2,978.0	2,888.0	-3.0		
Minnesota	460.0	454.0	2,624.0	2,563.0	-2.3		
Mississippi	8.0	7.0	32.0	25.0	-21.9		
Missouri	72.0	69.0	260.0	242.0	-6.9		
Montana	11.0	10.5	61.0	57.0	-6.6		
Nebraska	59.0	57.0	362.0	351.0	-3.0		
Nevada	33.0	32.0	201.0	196.0	-2.5		
New Hampshire New Jersey	10.5 4.4	10.5 4.3	58.0 24.0	55.0 23.0	-5.2 -4.2		
New Mexico	335.0	294.0	2,099.0	1,859.0	-11.4		
New York	626.0	620.0	3,846.0	3,807.0	-1.0		
North Carolina	40.0	39.0	239.0	237.0	-0.8		
North Dakota	15.0	14.5	82.0	80.0	-2.4		
Ohio	260.0	249.0	1,425.0	1,370.0	-3.9		
Oklahoma	40.0	39.0	178.0	181.0	1.7		
Oregon	125.0	126.0	647.0	652.0	0.8		
Pennsylvania	475.0	468.0	2,565.0	2,502.0	-2.5		
Rhode Island	0.5	0.5	2.6	2.5	-3.8		
South Carolina	9.5	9.0	44.0	42.0	-4.5		
South Dakota	144.0	174.0	814.0	978.0	20.1		
Tennessee	29.0	27.0	135.0	124.0	-8.1		
Texas	617.0	634.0	3,883.0	4,072.0	4.9		
Utah	96.0	94.0	546.0	533.0	-2.4		
Vermont Virginia	120.0 74.0	119.0 71.0	642.0 381.0	635.0 370.0	-1.1 -2.9		
Washington	278.0	263.0	1,653.0	1,567.0	-2.9 -5.2		
West Virginia	5.0	5.0	19.0	1,367.0	-5.2		
Wisconsin	1,265.0	1,273.0	7,820.0	7,829.0	0.1		
Wyoming	8.0	9.0	52.0	56.1	7.9		
Other States ³	0.8	1.0	1.7	1.3	-23.5		
United States	9,466.0	9,381.0	56,847.0	56,263.0	-1.0		

⁻ Represents zero.

⁽D) Withheld to avoid disclosing data for individual operations.

(NA) Not available.

1 Includes dry cows. Excludes heifers not yet fresh

¹ Includes dry cows. Excludes heifers not yet fresh.
2 Excludes milk sucked by calves.

³ Other States includes Alaska and Hawaii.

Statistical Methodology

Survey Procedures: Primary data used to determine these estimates were obtained from a sample of producers. Individual States maintain a list of all known milk producers and information on the size of their herd. States use all known sources of producers to ensure that their lists are as complete as possible. Generally, all large producers and a sample of small producers are included in the survey. Questionnaires are mailed to producers near the end of the month to obtain data for the first day of the month. Additional reports are obtained by telephone, as needed, to supplement the mail response. Where feasible, States utilize state and federal administrative data to estimate milk production. This eliminates duplication of data gathering by different government agencies. Indications of milk cow inventory are also obtained in the January Cattle Surveys.

Estimation Procedures: Regional Field Offices prepare these estimates by using a combination of survey indications, historic trends, and any available administrative data. Individual State estimates are reviewed by the Agricultural Statistics Board for reasonableness.

Revision Policy: Milk production, milk per cow, and number of milk cows are subject to revision the following month after initial publication for monthly States or the following quarter for the quarterly States. Normally, administrative data from Federal Market Orders, State Departments of Agriculture, or other sources are the main basis for revisions. However, administrative data for all States may not be available in time for these revisions. Estimates are again subject to revisions in February each year based on additional administrative data. In the event that additional changes are necessary, a third revision is possible in February the following year. Estimates are again reviewed after data from the five-year Census of Agriculture are available. No revisions are made after that date.

Reliability: Since all operations with dairy animals are not included in the sample, survey estimates are subject to sampling variability. Survey results are also subject to non-sampling errors such as omissions, duplications, and mistakes in reporting, recording, and processing the data. The effects of these errors cannot be measured directly. They are minimized through rigid quality controls in the data collection process and through a careful review of all reported data for consistency and reasonableness.

To assist users in evaluating the reliability of the estimates in this report, the "Root Mean Square Error" is shown for selected items on the next page. The "Root Mean Square Error" is a statistical measure based on past performance and is computed using the differences between first and final estimates. The "Root Mean Square Error" for milk production estimates over the past 20 quarters is 0.2 percent. This means that chances are 2 out of 3 that the final estimate will not be above or below the current estimate of 56.3 billion pounds by more than 0.2 percent. Chances are 9 out of 10 that the difference will not exceed 0.3 percent.

Reliability of Quarterly Milk Production Estimates

[Based on data for the past 20 quarters]

Item	5 .	90 percent		Differen	Difference between first and latest estimate			
	Root mean square error	confidence		0	1	Quarters		
	oquare error	level	Average	Smallest	Largest	Below latest	Above latest	
	(percent)	(percent)	(1,000)	(1,000)	(1,000)	(number)	(number)	
Milk production	0.2	0.3	66	7	215	14	6	
All milk cows	0.1	0.2	10	1	26	16	4	

Information Contacts

Listed below are the commodity specialists in the Livestock Branch of the National Agricultural Statistics Service to contact for additional information. E-mail inquiries may be sent to nass@usda.gov.

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	` '
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Sherry Bertramsen – Livestock Slaughter	
Ryan Cowen – Cattle, Cattle on Feed	(202) 720-3040
Anthony Fischer – Hogs and Pigs	
Logan Hartley-Sanguinett – Sheep and Goats	
Mike Miller – Milk Production and Milk Cows	(202) 720-3278
Suzanne Richards – Dairy Products	(202) 720-4448

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For more information on NASS surveys and reports, call the NASS Agricultural Statistics Hotline at (800) 727-9540, 7:30 a.m. to 4:00 p.m. ET, or e-mail: nass@usda.gov.

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